# COMMITTEE CONFERENCE AND EVIDENTIARY HEARING BEFORE THE

# CALIFORNIA ENERGY RSOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the Matter of:	)	
	)	
Application for Certification	)	Docket No.
for the Carlsbad Energy	)	07-AFC-9
Center Project	)	
-	)	

HILTON GARDEN INN
WAVECREST BALLROOM
6450 CARLSBAD BOULEVARD
CARLSBAD, CALIFORNIA
FRIDAY, MAY 20, 2011
9:02 A.M.

Reported and by: Martha L. Nelson, CERT

#### APPEARANCES

## COMMITTEE MEMBERS

James Boyd, Commissioner and Presiding Member

#### HEARING OFFICER AND ADVISORS

Paul Kramer, Hearing Officer

Tim Olson, Advisor to Commissioner Boyd

### STAFF, CONSULTANTS AND STAFF WITNESSES

Richard Ratliff, Staff Counsel
Mike Monasmith, Project Manager

#### APPLICANT

Jim McKinsey, Attorney

George Piantka, Project Manager

Kimberly Hellwig, Stoel Rives

Steve Hoffmann, President, NRG West

#### INTERVENORS

Arnold Roe, PhD, Power of Vision

#### CITY OF CARLSBAD

Alan Thompson, Attorney

Joseph Garuba, Project Manager

## APPEARANCES (Continued)

## WITNESSES

Casey Weaver (Telephonically), CEC Robert Mason, CH2M Hill

## PUBLIC SPEAKERS

Catherine Fredinburg, Resident (Telephonically)

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## PROCEEDINGS

9:02 A.M.

COMMISSIONER BOYD: Good morning, everybody.

Welcome to the second day of the California Energy

Commission's siting committee evidentiary hearing and

committee conference on the Carlsbad Energy Center Project.

Everyone I see in the very limited audience was here

yesterday, and I don't think I have to repeat too much.

I'm Jim Boyd, the presiding committee member for this siting case. And I'm joined by my hearing advisor on my left, or really just my Advisor, Tim Olson. And on our right, Paul Kramer, our hearing officer who will conduct this hearing for us.

And with no further ado, other than another welcome and thank you, I will turn it over to Mr. Kramer as we pick up where we left off yesterday with agenda items that were scheduled for this morning. Mr. Kramer.

HEARING OFFICER KRAMER: Thank you. Just to confirm, can somebody on the WebEx telephone connection confirm that you're hearing us okay?

MR. WEAVER: This is Casey Weaver. I hear you.

HEARING OFFICER KRAMER: Okay.

MS. FREDINBURG: Absolutely.

HEARING OFFICER KRAMER: Great. Thanks. Just a caution; if you've got noise in the area where you are go

ahead and mute your phone on your end. I can do it here, but then you can't un-mute yourself. So it's better if you police your own noise.

And with that, where we are is we're continuing the discussion of extraordinary -- the extraordinary public purpose issue. Yesterday we had some discussion and then the parties indicated, at least some of them, that they were going to go off and -- and discuss things among themselves for a little while to see if they could come to at least some better understanding of their positions and what they might be able to do.

So let's first hear a report about how that worked out, and then we'll see where we need to go from there.

We'll start with Mr. McKinsey.

MR. MCKINSEY: I don't like those little foam things. I can't tell when the light's on.

We, indeed, we had -- we had a brief workshop right after we closed the record yesterday. And -- and then had, following that brief, very brief workshop we had discussions yesterday here in the room. And then we had another discussion this morning with the city, the -- discussing the -- the needs and interests of both NRG and the city and -- and particularly focused on the future of the -- of the -- the existing unit one through five structure, as well as, generally speaking the -- the future

of the western portion of the property west of the railroad tracks.

And I think we both agreed to say that we've had a positive initial exploration, but we're going to need more time. And we committed to attempting to work together to present back to the committee by the comment deadline something that we could both endorse in terms of condition language that -- that, you know, I think would be acceptable from the committee's perspective, as well, regarding an extraordinary public purpose addition to the project related to the future of four and five and the structure there. We may not. I mean, it's -- all we've had is an initial exploration.

And I'll let Mr. Thompson speak from his perspective on behalf of the city. But -- but we were encourage. And if we don't reach agreement then I think we -- we'll both as parties submit again, by the comment deadline, perhaps some dueling options. But I think our goal is to try to -- to -- to find a positive way to provide the committee what they seek in terms of extraordinary public purpose benefit that goes along the lines of -- of what both the city and other parties have desired.

HEARING OFFICER KRAMER: Okay. That sounds positive. What -- what the committee is trying to achieve is -- is a way to -- to not have that plant, that old plant

sit there for what could be years if, you know, the -- now having viewed intimately the city's planning process I suspect the planning for -- for some sort of replacement use on that site could take quite awhile. And it might take quite awhile to -- to get to the point of starting that process.

So what we'd like to see if that the removal of that, you know, big, I don't think eyesore is too -- too unfair a characterization, occur sooner rather than later.

And -- and that would definitely be, you know, a positive benefit for the public. And a flat site that doesn't have that on it is going to, at least in our view, remove a lot of the, you know, a lot of the concerns about the -- the visual, well, the -- the visual insufficiencies that are created along the coastline. And then if takes awhile to -- to put something else in there then, well, that's, you know, that's not our business anymore because it -- I'm presuming it's not going to be a power plant.

MR. MCKINSEY: Hearing Officer Kramer, I'm glad you said that, because there was one thing that didn't come out yesterday accurately or completely in the record. And it really wasn't the right -- I mean, it wasn't a direct subject matter yesterday. It really best falls under the topic we have now. And that is the current need or obligation of units four and five, the -- because that is

the constraint.

NRG has the same mutual interest of seeing the -the highest and best use of that western parcel. And this
project is designed to further that along by -- by what was
described, which is a smaller, modern, more efficient
facility between I-5 and the railroad tracks.

The constraint that is the key struggling point is how do we provide some certainty and clarity and -- and some form of either a pressure or a deadline or both to the future of that building when the units inside it, four and give, are still under a need basis? And they're not under an RMR contract. What SDG&E did was pull them out of the RMR and entered into a tolling agreement for them. And -- and so they're under a tolling agreement, and they're primarily still required and needed for voltage support under various conditions on the line that comes down the coast between San Onofre and the larger load center of San Diego.

And so right now at this time NRG is not free to shut down four and five. And to do that SDG&E has to release them from that need, and ISO has to concur with that. And -- and ISO is really the key party here, is that CAISO under the new system we've -- we've created throughout the country with independent system operators and -- and regional trading organizations, they really are the

determinant of when they can be released. And, of course, under the new structure that we created with AB1X the California Public Utilities Commission has to approve the shutdown of any of these generating units, as well. You have to submit a closure plan. It has to be approved by the California Public Utilities Commission.

So what that means is that the -- to shut down four and five, and it will come, and we know it's going to come at some point, it's going to require that -- that ISO bless and endorse that before the PUC would allow them to be shut down. And what -- NRG has never been able to -- to commit to that, simply because they don't control that. And that's been the -- the constraint that has prevented NRG from saying, yes, we can take on a specific obligation or commitment. And -- but I think, you know, we're trying to find a way to -- to give assurances that -- that when that set of events occurs that it will be terminated and torn down.

And then secondly, ways to increase either pressure or to ensure that -- that the project owner doesn't have the ability to -- to change their mind and say, well, now we want to seek further operations, that, you know, it's a true good faith and obligatory commitment. And we see the inclusion of a condition in the -- in this decision the -- one way to give the city that type of certainty that now the

Energy Commission has the ability to -- to -- to enforce that and to say, you know, you made this commitment and you're not following it. And so -- but finding the language that recognizes the need issue.

And -- but the other, you know, the once-through cooling changes which are probably going to help drive this forward, as well. And again, this project in many ways facilitates all this, and that works to the advantage.

But -- but that's the complicating layer here is -- is how to give certainty when the units aren't released to be shut down at this time.

HEARING OFFICER KRAMER: Now is -- is it still the -- still the case that some additional generation needs to come online somewhere in this area in order to allow those to be released, or has that picture changed since --

MR. MCKINSEY: That's the -- that's the -- the latest concept. I don't think that we really know at this moment.

One of the other issues is that everything is in flux. The -- we've got the Sunrise Powerlink. We've got this idea of increase going to 33 percent. And SDG&E is -- is accelerating very hard in trying to increase the penetration of renewables. And -- and they -- they lag between the other two IOUs. And I think that's part of what ISO has to do is has to -- is has to either get a clear

hypothetical that they could then authorize the release, or -- or have, you know, an actual, you know, decision. Like if there is more megawatts then they say, okay, now four and five are released.

The other -- just the latest kind of interesting layer in all this is the San Onofre Nuclear Power Plant and the increased scrutiny and evaluation being put on it for the very topic we're supposed to shift to next, as an example, the -- the tsunami risk. And -- and so I think ISO in the last couple of months has made, and really since the nuclear incident, has made a couple of statements to that regard regarding, you know, re-scrutinizing this region.

And so the end result is that we don't have -- the latest answer we have is that they need more generation in this area in order to release it. And they -- and the problem is often that you have to submit -- and you end up with hypotheticals. And yet to go forward on a project you need certainty. And -- and again, this project could be the -- the thing that gives that certainty because with this project available and online they may then say, okay, now we don't. But they certainly haven't said at this point that that would be enough.

COMMISSIONER BOYD: Mr. McKinsey, your -- it is -- it is very unfortunate we didn't have some of this discussion yesterday with a much broader and larger audience

about the tolling agreement situation relative to units four and five. It might have helped some public to understand the situation even better, and even last night, even that much better. But so be it. It's -- at least it's in the record now and it's understood.

I really do appreciate the -- the words you have spoken today and therefore representing the -- the sentiments and the thoughts of NRG on this subject. They're very positive. And I do hope a resolution regarding this can be reached sooner rather than later and continue the -- the, what I see and understand as good-faith effort, to address what the public down here feels so strongly about. Mr. Kramer kind of called it a visual disturbance perhaps, rather than a blight on the landscape, but he came close. But nonetheless, that's the way some people feel.

A question though. Is SDG&E -- and this -- this may be purely rhetorical because you may not even be able to venture an answer. But is SDG&E likely to want energy from your new units, rather than from units four and five as it relates to why they have tolling agreements even for four or five? Can you say the new units would be more efficient and -- and provide less expensive or no more expensive energy to SDG&E should they want this backup?

MR. MCKINSEY: You asked the question really simply at the very beginning, and then -- and then it got

more complicated.

COMMISSIONER BOYD: Then it got then complicated.

MR. MCKINSEY: The first one was are they likely to want this generation more instead of four and five. And I think that, you know, that any electrical engineer would say, sure, yes, that's an easy answer. They're new, efficient, and -- and they have a fast responsive characteristic. And they're located at the same node.

Then it got into this question of are they more expensive. And -- and then you start getting into the difference between a steam-based spinning reserve unit and a gas turbine that's really designed more as a peaker response and -- and how you -- you do the pricing between those types of contracts. And -- and so I think that is a lot tougher to figure out. And -- and that's the thing where it's -- it's a rhetorical or a hypothetical that gets worked out in, you know, a 100 page power-purchase agreement negotiation that has so many layers to it that I don't think anybody even answers it very clearly afterwards. Just everybody is satisfied with the final arrangement.

COMMISSIONER BOYD: Well, I appreciate your response. I knew it was a complicated, maybe impossible question. But - and -- and unfortunately for our limited audience here it's educational to all of us. There are just not enough people hearing this.

And -- and my last comment is -- it just dawned on me as you were answering that a larger audience might have understood. I'm not sure they would have appreciated anything I had to say.

But when we first did the site visit for this facility a long, long time ago one of the very impressive things to me, and I believe many of the staff of the CEC was your intention to utilize, deploy quick-start capability in this plan, which is something historically we see in simple-cycle peaker plants, which we may have too many of them in this state because they are quick-start, but not nearly as efficient as a combined cycling unite.

The fact that your company was going to utilize that technology before it became fashionable was -- was meaningful to us. And you kind of established for me a precedent that I have used in many other settings in having discussions with people about simple-cycle peaker proposals when more and more technology for quick-start and a combined cycle became more apparent to many folks. And I have used you as a little bit of a poster child on more than one occasion to indicate now wait a minute, you know, we're looking at this very sizable facility that has that capability, why can't you do the same.

So in any event, not that that means anything, but it -- it suddenly dawned on me that that has been the case

and that might as well be in the record here. So enough said. Thank you.

HEARING OFFICER KRAMER: Mr. Thompson.

MR. THOMPSON: Thank you, Mr. Kramer and Commissioner. The city has a different constituency to answer to. And possibly getting to -- to an endpoint may require us to -- to -- to go through more hoops than a private company.

But having said that, we huddled last night and we, I think, had a very fruitful discussion this morning that was open and, I think, focused on getting to an endpoint here. I think we've taken steps to work together and work very hard to try and -- and figure out how the city's needs and NRG's needs can -- can come together.

You're absolutely right that I think I can characterize the decommissioning and demolition of the building and units one through five as -- as being extraordinarily important to the -- to the citizens of Carlsbad. And I don't think I'd be telling any secrets to say that that also is very close to the top of our -- of our list.

So we -- we made commitments to work together, and I think that -- that that will start immediately. And I think we're committed to try and get the committee something that -- that is workable and gives us comfort that we can go

ahead successfully.

COMMISSIONER BOYD: Well, I appreciate that. Thank you.

HEARING OFFICER KRAMER: Okay. Procedurally, is there any chance that that could be filed a couple days ahead of the comment deadline? That would allow the other parties just a little bit of time to comment, which --

MR. MCKINSEY: I think we'll make our best efforts to accomplish that.

HEARING OFFICER KRAMER: Okay. If not it -- since they're -- they're probably not going to be participating in your negotiations. And --

MR. MCKINSEY: Right.

HEARING OFFICER KRAMER: -- it may be that the intervenors are satisfied with the city's efforts on their behalf. But -- but it may also not be the case.

MR. MCKINSEY: No. And, in fact, I think I -the -- I think the intervenors would say that we've always
been respectful of their interests as well. And that while
I think we have to negotiate directly with the city in terms
of this discussion, the sooner that we are able to at least
involve them and inform them of what we're thinking about to
ensure that they're able to opine on it to the committee
is -- serves the function of the committee, which is to
really evaluate whether they found the right way to ensure

an extraordinary public purpose.

And so we'll endeavor to accomplish that one way or another. One would be to perhaps have -- circulate to the parties if we can, and I don't -- I'm not committing to this, a draft version of something so that they're able to opine on it, even though the final one may show up on the deadline. Or maybe if we can finish it a few days early, make sure all the parties see it and have the chance to comment on it.

HEARING OFFICER KRAMER: Okay. Just a couple follow-up questions. Among the issues that we mentioned in our -- our statement of the -- the issues, so to speak, was the cost of removable and financing those costs.

And let me ask as a precatory question, is financing really an issue for this, the removal efforts, or is -- is -- are the costs within the range of what, for instance, NRG can handle? Or do they -- are they looking for some assistance from the city, maybe in terms of a loan or something like that?

MR. MCKINSEY: The -- the removal and -- and demolition of the existing facility is not the type of expense that's comparable to say construction of a new facility. So it's not the cost, per se, but it is the spending decision that -- that both NRG, as well as the city, has a responsibility to its constituents when it

spends money. And so NRG has to be able to say to its shareholders, you know, we're investing the expenses for the following reasons. And so that's really the decision.

But in terms of having to satisfy lenders to complete a demolition that wouldn't probably be the case.

HEARING OFFICER KRAMER: Okay. Well, we'll just throw it out that it, you know, it might seem somewhat fair, assuming that the city, as legend has it, has, you know, has some money in their redevelopment accounts that this might be a good use, you know, to -- to loan it, perhaps, if they want to accelerate the -- the demolition if -- you know, kick in a little bit if necessary. And it's just a thought we -- we think the party's should explore and perhaps discuss later.

MR. MCKINSEY: Just to clarify the record, the redevelopment accounts are separate from the city's general fund. And while the city's general fund does maintain a reserve balance the city's redevelopment agency is actually underwater in this area due in part to the diminishing value of the existing power plant, based on what the current valuation is, so there is limited ability to loan money. But there are other protections that are afforded redevelopment agencies that we would be I think open to discussing with the company.

HEARING OFFICER KRAMER: Okay. And that's all we

want to do today is provoke that discussion.

COMMISSIONER BOYD: At least you didn't say, and you guys want to take the money back to Sacramento anyway.

HEARING OFFICER KRAMER: Okay. My -- it's my impression that we've exhausted that topic then. Does anybody disagree? Okay.

That leaves us with the remaining topic which was the -- the lessons from the recent earthquake and tsunami in Japan. This was already, in general, earthquakes, seismic issues that were called, tsunamis, and even liquefaction which was brought up by a gentleman making a public comment last night, are addressed in the decision. So we'd be curious to -- to hear what -- what else is -- might be relevant and suggest that either revisions or other changes to the -- to the discussion in the decision.

Dr. Roe had submitted -- well, he thought he had submitted, his -- his party, a report. It was the CEC's -- let me get to it here -- AB 1632 report, which basically was directed at the nuclear facilities in California. But he wanted that to be considered; either we take notice of that, which we can do, or that become an exhibit in this case. And he wanted to question staff and perhaps the applicant's witness on the -- the applicability of some of the conclusions in that report to this project, and perhaps other matters as well.

1 Is that correct, Dr. Roe? 2 DR. ROE: That's -- yes. 3 HEARING OFFICER KRAMER: Okay. Now I don't know if anybody else has the AB 1632 report. I -- I pulled it up 4 5 just now from the Energy Commission website. Do we need a 6 couple minutes for people to familiarize themselves? 7 Weaver, you're on the phone? 8 MR. WEAVER: Yes, I'm here. 9 HEARING OFFICER KRAMER: Okay. And you're the 10 staff witness on this question; correct? 11 MR. WEAVER: Yes. 12 HEARING OFFICER KRAMER: And have you had a chance to look at that report? 13 14 MR. WEAVER: Yes, I have. 15 HEARING OFFICER KRAMER: Okay. Mr. McKinsey, 16 do -- do your folks need a little bit of time? 17 MR. MCKINSEY: Our witness isn't familiar with 18 that particular report. But we did prepare Mr. Mason to the 19 ability to -- to address the -- the -- I think what will be 20 the same topic which is these lessons learned and 21 consequences and -- and tsunami and earthquake risks. 22 HEARING OFFICER KRAMER: Okay. And Dr. Roe, you 23 had just a couple pages you were reading from; is that 24 correct? 25 DR. ROE: That's correct.

1 HEARING OFFICER KRAMER: So could you share that 2 with Mr. Mason for just a minute or so, or could he be 3 looking at that while you're asking your questions? 4 DR. ROE: Yes. 5 MR. LAYTON: Casey is not a witness on this, but 6 he's available today. He's not a witness. He's never been 7 sworn. 8 HEARING OFFICER KRAMER: No. We can swear him. 9 MR. LAYTON: Okay. 10 HEARING OFFICER KRAMER: That's fine. I'm just 11 trying to get it set up and see if we need to take a couple 12 minutes to have Mr. Mason look at it. 13 And so, Dr. Roe, could you give your copy then 14 to -- to Mr. Mason here so he can take a look? 15 DR. ROE: Sure. 16 HEARING OFFICER KRAMER: And if -- and if you --17 if you need to look at it, as well, you could -- you could 18 sit alongside him at the table and ask your question, if 19 necessary. 20 DR. ROE: Over there? 21 HEARING OFFICER KRAMER: Sure. If you need to 22 share the documents, for instance. 23 DR. ROE: Okay.

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to the -- to the use of the AB 1632 report?

HEARING OFFICER KRAMER: And is anybody objecting

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MR. MCKINSEY: Hearing Officer Kramer, the one point we wanted to emphasize just to provide clarity, and I think it's particularly important here from a fear or a risk perspective is that when evaluating a nuclear power plant for the hazards or risks associated with earthquake and 6 tsunamis, what we learned, if we didn't already know it and 7 we should have known it, was that nuclear plants by virtue primarily of decay have a vulnerability and -- that -- that the tsunami and the earthquake demonstrated very clear, to 10 sustained power and cooling provisions. Whereas when you look at a power plant that -- that doesn't have that, say a 12 natural gas-fired one, or even a wind facility, you have an 13 electric hazard and perhaps an explosive natural gas hazard. 14 Very different.

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And from the perspective of a tsunami washing over the -- in one sense it's -- it's a significant economic risk for the project owner, obviously, if -- if a project is inundated. And from a reliability perspective there's an interest in -- in a project, you know, being able to survive a tsunami or an earthquake and still operate.

And I think the comments that were made last night were an example. Commissioner Boyd pointed out that California has some of the strictest, if not perhaps in the world, definitely in the United States, building standards for earthquake safety and security. And so this report is

focused on nuclear power plant risk assessment and not a gas-fired power plant perspective. And so to some extent it's focused on risks that aren't as relevant. But that doesn't mean that there aren't a reliability question.

And -- and it's worthwhile understanding and ensuring, and I think the building standards do accomplish that, that there wouldn't be a gas explosion from the gas powered -- the gas that's being provided onto the plant. But it's a very different risk perspective.

And so with that comment we don't have any issue with this being admitted. But we just wanted to -- we didn't want there to be a perception that the same risks and hazards associated with nuclear power plants would be present in a natural gas-fired power plant.

HEARING OFFICER KRAMER: Okay. And I assume that will come out in the testimony again since you're not a witness, but somebody will --

MR. MCKINSEY: Well, you were asking about admission. And I just --

HEARING OFFICER KRAMER: Right.

MR. MCKINSEY: -- I wanted --

HEARING OFFICER KRAMER: Yeah.

MR. MCKINSEY: That was really more of a public comment to -- to the extent that, you know, if we have any attendees that they just understand that difference. I --

1 HEARING OFFICER KRAMER: Right. MR. MCKINSEY: I really don't intend that as a 2 3 testimony but as a comment. 4 HEARING OFFICER KRAMER: Okay. Yeah. I think we 5 understand that it -- it's very different when the fuel 6 itself can not be shut off, in effect. And when you quit 7 cooling it then bad things happen to nuclear fuel. 8 So, Mr. Weaver, can you raise your right hand so 9 you can be sworn as a witness. 10 MR. WEAVER: It's up. 11 HEARING OFFICER KRAMER: Do you swear or affirm 12 that the testimony you are about to give in this proceeding 13 is the truth and the whole truth? 14 MR. WEAVER: Yes. 15 HEARING OFFICER KRAMER: Okay. Thank you. Please 16 state --17 MR. MCKINSEY: Hearing Officer Kramer --18 HEARING OFFICER KRAMER: Yes?

MR. MCKINSEY: -- I just wanted to indicate that

Mr. Mason is our -- our witness for these questions, and he

21 was previously sworn --

22 HEARING OFFICER KRAMER: Okay.

MR. MCKINSEY: -- at our evidentiary hearings a

24 year ago.

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HEARING OFFICER KRAMER: Okay. So Mr. Mason was

22 1 previously sworn. 2 So first, Mr. Weaver, please state your name and 3 spell your last name for our court reporter. MR. WEAVER: May name is Casey Weaver, 4 5 W-e-a-v-e-r. 6 HEARING OFFICER KRAMER: Okay. You might spell 7 your first name for her, too, so she gets that. 8 MR. WEAVER: That's C-a-s-e-y. 9 HEARING OFFICER KRAMER: Thank you. And then, 10 Mr. Mason, if you could do the same? 11 MR. MASON: Yes. Robert Mason, M-a-s-o-n, with CH2M Hill, representing the applicant. 12 HEARING OFFICER KRAMER: Okay. I believe the only 13 14 party who -- who's here that wants to cross-examine is Power 15 of Vision. But after they go we'll let the city and the 16 staff ask any questions they would like to. 17 So Mr. -- Dr. Roe, go ahead with your questions. CROSS-EXAMINATION OF MR. WEAVER 18 19 DR. ROE: Mr. Weaver, I'd like to thank you for getting out of your sick bed to come and testify this 20 21 morning. I appreciate that. 22 MR. WEAVER: I hope you can understand my garbled 23 language here. 24 DR. ROE: I understand you're a geologist?

MR. WEAVER: Yes, that's correct. I'm a

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professional geologist and a certified engineering geologist.

DR. ROE: Good. You indicated to Mr. Kramer earlier that you are familiar with the AB 1632 report.

MR. WEAVER: Yes.

DR. ROE: And maybe for those who are not so familiar, let me read a paragraph from page seven, which will lead to my question about your knowledge of this matter. The paragraph says that,

"The major uncertainties regarding the seismology of the SONS," that's the San Onofre site, "relate to the continuity structure earthquake potential of a nearby offshore fault zone, the South Coast Offshore Fault Zone. And the faulting connects -- and that connects faults in the Los Angeles and San Diego regions. There is also uncertainty regarding the potential for blind thrust faults near the plant. Well-planned high quality three-dimensional seismic reflection data at strategically chosen locations may resolve many of the remaining uncertainties and might change current estimates of the seismic hazard at the plant."

The report goes on to recommend that the owners and other people conduct further studies on these issues.

Are you familiar with any ongoing studies to this -- addressing this issue?

MR. WEAVER: There's a proposal by Southern
California Edison to conduct the 2-D and 3-D seismic
evaluations. And there's a proposal out for that work to be
done.

DR. ROE: There's a proposal to conduct that work?

MR. WEAVER: Yes.

DR. ROE: Do you have any feeling as to when such additional surveys may be conducted?

MR. WEAVER: You know, there's a lead time from getting authorization from the CPUC for the rate change to finance that and doing the work. So you're looking somewhere in the neighborhood of three years to -- to have that work completed, is -- is my current understanding.

DR. ROE: So the -- okay. Are you familiar with how the California Building Code uses the seismic study or the seismic surveys to ascertain the design criteria for non-nuclear power plant?

MR. WEAVER: In a general way.

DR. ROE: Could you elaborate?

MR. WEAVER: Well, the California Building Code uses the zone areas for various acceleration spectra, I guess. They — they zone parts of California from one to four, four being the highest. I don't know what that threshold is to go from a three to a four, but it's the highest level. So they have specific requirements for

construction based on -- you know, for -- for that particular zone to -- to -- yeah. That's how they develop, you know --

DR. ROE: I see. And --

MR. WEAVER: -- from the building code.

DR. ROE: And do you have any feeling for how long it would take the California Building Code to be revised in the event that a future survey shows that the current estimates of earthquake fault dangers or an underestimate and have to be revised upwards?

MR. WEAVER: No. I don't have a very good handle on how long it would take to revise a document like that.

DR. ROE: Okay. I raise that issue because in one of the responses to POV's original request that this issue of earthquakes and tsunamis be brought up, the applicant replied that they will conform to the latest building codes. And in effect, at a time not later or not earlier, I forget, but 180 days prior to their submission of the plans.

In other words, from what you tell me it might take three, certainly three to more years for the surveys to be done, and if any corrections are needed for the building code to be amended. Whereas the applicant, if the commission approves this project, will be able to submit their plans the day after the approval and they would be able to construct the plant according to their — the

current criteria, which in Section 4.5.3.5.2 of the AFC states that the design will conform to a 10 percent, probably, of being exceeded in 50 years at a value of .27 Gs. And so that value may not be changed for many years.

In your work on -- for the commission -- for the commission, for the staff, in looking at the effects of earthquakes -- not tsunamis now but earthquakes -- are -- are you familiar with the Kashiwazaki-Kariwa Nuclear Power Plant problem that occurred in May of 2007?

MR. WEAVER: Yes, I am.

DR. ROE: Good. There's an example where a plant was designed for a relatively -- for -- I'm trying to see if I have the information on the design criteria for that plant. But what happened there was a relatively small earthquake; it was only 6.6 on the Richter scale. They experienced an earth movement two-and-a-half times that of the design criteria, resulting in a shutdown of that power plant for 21 months.

That had a significant effect on the Japanese net because Kashiwazaki-Kariwa Nuclear Power Plant is by far the largest one in the world. They were shut down for structural reasons. The found structural deficiencies. There was some minor damage. Fortunately, there was no loss of life. But again, one of their major infrastructures were shut down for almost two years. Now that was a 6.6

earthquake.

You're also -- you're, I'm sure, Mr. Weaver, you are also familiar with the Sylmar quake; are you not?

MR. WEAVER: The Sylmar?

DR. ROE: Yes.

MR. WEAVER: Yes. Uh-huh.

DR. ROE: Which was a 6.6 earthquake in which the ground movement that was experienced was a 1.7 or 1.8 Gs.

Now what struck me when I saw the .27, I said, well, okay, that plant -- there's always redundancy. Engineers design with a factor of safety of three, four sometimes. Maybe it could survive without major damage. But if I look at the Sylmar earthquake and I see that the ground movement in a 6.6 earthquake was almost 8 times the design criteria, it raises some concern in my mind.

And I'm wondering whether we are caught in a Catch 22 here where the plant can be built to standards that may not reflect the -- the true severity of an earthquake. And even if they did reflect the severity of the earthquake, it may be subject to earth movement and therefore structural damage, maybe not life threatening, but certainly severe enough to put this power plant out of operation at the very time when it would be important to support -- to operate as a local load center when the earthquake may have damaged transmission lines bringing energy to this area.

So this plant is touted as being an important load center in times of emergencies. And yet there seems to the possibility, looking at the Kashiwazaki-Kariwa example that it will not -- it could not be available when we most needed it.

Now three to fives years to wait to get the information may be a little bit too long to wait on this -- on this project. But I strongly urge that the staff and the commissioners do -- have some further consideration given to the possibility that the proposed earthquake design criteria be increased.

Again, speaking as an engineer, increasing the -doubling -- doubling the ground movement requirement from
.27 to .5 is not a major cost consideration in the design of
this plant. It -- it certainly would ensure that the
foundations were more secure. I'm particularly concerned
because I've been involved in the design of gas and steam
pipelines, and I know of their susceptibility to earthquake
damage. And the additional cost for putting in better
hangers on these pipes and better earthquake provisions is
not a major cost. And I urge the commission to reconsider
the design -- the -- the .26 G design criteria for that
plant.

HEARING OFFICER KRAMER: I don't know if that was a question exactly. But, Mr. Weaver, do you have any

response to that request?

MR. WEAVER: I -- I didn't write that section. I don't know what methodology was used to arrive at that acceleration. Typically, you know, there's science involved where people will look at the type -- type of faulting and size of earthquake that's likely to occur, look at the soil characteristics and determine, you know, the probably maximum ground acceleration based on the existing information.

HEARING OFFICER KRAMER: And is some of that -does -- are -- are some of those factors reflected in the -the designation of the earthquake zone? So in other words,
if it's designed under the building code for the particular
earthquake zone that it's been identified as residing in do
you believe the appropriate factors are applied?

MR. WEAVER: That's -- I think that's more of an engineering question.

HEARING OFFICER KRAMER: Okay. Did you have any more questions, Dr. Roe? No. He says no.

Mr. Mason, on behalf of the applicant, did you want to respond to his, in effect his request to increase the -- the -- the particular design parameter?

CROSS-EXAMINATION OF MR. MASON

MR. MASON: Well, I think what's important to recognize -- of course, I think we all do -- is that as new

information is developed and investigations are accomplished our standards continue to change, and they will continue to change in the future. What was learned from the Northridge Earthquake and the Sylmar Earthquake reflect what we have in our building codes today, and our seismic codes, which are much more stringent than they were at that time. You know, humans are fallible, obviously. And as new information comes about we have to take those things into consideration.

Now the -- in terms of -- of -- of the project, clearly it's going to be designed to all standards. There will be site specific investigations to ensure that we are applying the appropriate standards and site conditions.

That is part of -- of any engineering requirement for large infrastructure projects such as a power plant. We work diligently with staff and with experts in terms of ensuring that that investigation is done properly, that it has the appropriate peer review.

Again, in terms of the standards, they do apply a factor of safety. The intent is not just to meet the requirement but to apply that factor of safety appropriately. Is it an exact science? No. The -- the process continues. It goes through -- I guess I'll stop at that point.

HEARING OFFICER KRAMER: Are the -- are the risks from seismic damage to a natural gas-fired plant the same as

they are to a nuclear plant? If you could just briefly explain the difference if there is one.

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MR. MASON: Well, I think clearly any power plant, whether it is -- is fossil-fueled, natural gas or a nuclear plant, are complex structures and have control systems. Ιt really becomes, you know, a subjective discussion, I suppose, to a certain degree. Clearly given the fuel source, a nuclear facility has much more dire consequences in terms of -- of -- of some sort of issue of release of some sort. A natural gas facility, while it would, you know, potentially, you know, result in some sort of damage, we also have, I think, have to take into account that infrastructure throughout the state and the nation, not only power plants but it's waste water treatment facilities, like you said, it's transmission, highways, all those things are vulnerable to the same things we're talking about.

If a gas-fired plant goes out of service or if it's damaged, yes, there's going to be obviously an issue for electrical issues. But in terms of comparing risk to human health, if we want to go to that extent, obviously damage in a nuclear facility is much more of a concern than it would be for a gas-fired facility. You know, I mean, to put it bluntly, so CECP goes off line. Yes, it's going to be inconvenient. Yes, it's going to affect the region. That's going to be the same thing that happens with the

other gas facilities, as well.

If something like SONS or Diablo were to have a situation similar to some of the things that we've seen occurring in Japan, those would far outweigh and outstrip any concern that I think any person would have over the fact that CECP is offline.

Obviously, the -- the intent is this will be designed to the highest standards as -- that are applicable. As things come out during our process, if there are lessons learned or facts that result in changes to code requirements, obviously those will be accomplished. But it also -- at some point it is a fixed point in time. They are the codes that we have. And I think I'll stop at that point.

HEARING OFFICER KRAMER: And one of the differences is, is that nuclear fuel needs to be kept cold, whereas with a gas plant you can -- you can turn a valve and shut off a gas supply; right?

MR. MASON: That's correct.

HEARING OFFICER KRAMER: I think -- did any other party have any cross-examination or any questions for the witnesses?

DR. ROE: Mr. Kramer, can I cross Mr. Mason on the issue of tsunami, which we haven't discussed?

HEARING OFFICER KRAMER: Okay. Yeah. I was about

to asked. We mentioned we hadn't discussed tsunami at all. Go ahead.

DR. ROE: Recognizing that the potential for tsunami damage to that plant are probably not as critical as the earth acceleration that we discussed earlier, has the applicant done any further investigation into the potential hazard from a tsunami to the embankment that separates the lagoon from the pit?

MR. MCKINSEY: Can I ask what you just mean by further? Can you explain what you mean by further?

DR. ROE: Well, have they done any investigation? Let me put it that way.

MR. MASON: There has been a preliminary investigation done of -- and also based upon previous studies accomplished at the state level this area is shown to have, I believe it's a .3 to 3 foot maximum effect from -- rise from a tsunami. The plant base grade is at 35 feet. As with other seismic issues, as investigations, site-specific investigations are conducted we will evaluate that run-up requirement, as well.

DR. ROE: Mr. Mason, do you know the elevation at the bottom of the pit?

 $$\operatorname{MR.}$$  MASON: I would have to go back and check. I'm not sure that I have that off -- right off the top of my head. DR. ROE: Mr. Piantka, maybe --

 $$\operatorname{MR}.$  MCKINSEY: Are you -- do you want the answer to that or is that a --

DR. ROE: I want the answer to that because it refers to what I am going to ask about that.

MR. MCKINSEY: That is 3-0 feet, I believe 3-0 feet.

DR. ROE: 3-0 feet?

MR. MCKINSEY: Yeah.

DR. ROE: Good.

HEARING OFFICER KRAMER: That's above sea level?

MR. MCKINSEY: Yes.

DR. ROE: Good. Thank you. Admittedly I agree with you that there's probably very little likelihood that a tsunami will crest over the top of that embankment, 30 -- I think it's 31 foot -- foot at the lowest point by the railroad.

However, when tsunamis enter an estuary would you agree that there's an increase in the velocity of the flow of the water along the embankments, leading to increased erosion dangers?

MR. MASON: Based upon recent tsunamis, and even the ones that struck the U.S. after the earthquake in Japan, clearly harbors and estuaries and things like the lagoon are susceptible. There is probably some difference in terms of,

even along the West Coast, in terms of where there are sites that are more prone to tsunami run-ups based upon geography and land form. Crescent City is one of those, obviously. We did see, though, obviously, I think we all saw news where there was effect at Redondo and these types of things.

There is a potential. The lagoon is -- has some protection. As part of the evaluation it will be looked at to see whether or not additional buffering protection of the bank might be required, and if it is it will be accomplished.

DR. ROE: The AFC indicates that embankment that separates the estuary from the pit is of unconsolidated and in some places uncertain composition. Does the applicant plant to conduct any further efforts to consolidate that embankment or place riprap along the face of that embankment to reduce the possibility that increased velocities of the flow of the water along that embankment may erode that embankment to the point where whatever the crest level of the tsunami is flows into the pit and floods it, since it's only three feet above the normal estuary level?

MR. MASON: I think as the investigation goes forward and as issues are identified appropriate analysis will occur. I can't say at this moment exactly what that investigation may or may not be. But I would seem reasonable that as part of any engineering geo-technical

investigation that will occur, if there is risk identified along something of those then appropriate evaluation would be accomplished.

DR. ROE: Well, I'm just trying to point out that there may be a potential risk because of the uncertainties of that embankment. And I would hope that the applicant, at whatever point, would take further steps to either investigate or protect that embankment from possible erosion.

MR. MASON: We understand your concern and your point.

DR. ROE: Okay. Thank you.

HEARING OFFICER KRAMER: Okay. I think everyone else answered earlier that they had no questions, so we can close up this topic.

COMMISSIONER BOYD: Well, don't close it until you've --

HEARING OFFICER KRAMER: Commissioner Boyd.

COMMISSIONER BOYD: -- I've had my comments here, several things.

First, Dr. Roe, let me say I've -- I've appreciated and enjoyed your participation in these hearings, and I respect your knowledge on -- on a host of subjects.

Secondly, let me say that the -- the PMPD,

as we call it, has a fairly detailed discussion of seismic and -- and geologic aspects of this project, and several conditions with regard to additional studies that -- that are seen as necessary to the eventual construction of this facility. And I would -- and I want -- I want -- I also want to bring up something that was brought up last night. One gentleman here had extensive discussion about liquefaction.

If you read the PMPD you'll see that it recognizes that liquefaction is an issue. And while he made a significant issue out of the fact that this is all fill area, I think the staff's previous documents in the PMPD make reference to both long-standing existing geologic formations, and of the fact that there are -- there is some fill and there are requirements therefore to look into that issue before commencing construction of the facility.

Let me switch to AB 1632 and just for the record indicate that I have intimate familiarity with this report. I oversaw its preparation, both because at that time I happened to be a member of the Integrated Energy Policy Report Committee of the commission that directed this study be part of our integrated energy policy report a few years back, and secondly because of my continuing responsibilities as a state liaison to the Nuclear Regulatory Commission.

And I can assure you I have -- and the commission

has, and Mr. Weaver with whom I've interacted a lot over the past couple of years, we have very closely followed developments in Japan relative to the first earthquake, and certainly relative to the most recent earthquake, and have submitted a large amount of testimony to the Nuclear Regulatory Commission and to the -- and letters to the utilities relative to the need for these 3-D seismic studies at relates to the two nuclear plants. AB 1632 wasn't directed solely at the nuclear plants. It was -- it was directed at large plants in California. It just so happens the threshold criteria was such that only the two nuclear plants ended up need the criteria for this in-depth discussion. And that probably was a product of the author of the bill's desires, then Assemblyman Blakeslee, whose territory at the time -- and now Senator Blakeslee whose area of responsibility includes the Diablo Canyon plant, is a geologist seismologist and has extensive knowledge, and we've worked very closely with him.

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We have been urging the two -- the -- the owners of these two plants, PG&E owns Diablo, Edison is a majority owner but SDG&E a monitory owner of SONS, do to these 3-D studies. And -- and it's been -- it's been a tough push or pull. However, the most recent earthquake in Japan has left it pretty obvious these studies need to be done.

So as indicated, the utilities are taking steps

now to -- to undertake these 3-D studies. I, and probably you, wish they had been done some time ago. It wasn't -- it's inevitable now that it will be done. The timing is such that it -- it will be -- it will take into the future to have it done. And we expect a lot of information to either confirm or deny that there's any more additional risk offshore California to, A, the two nuclear plants and, B, just to further our knowledge base on seismic activity along the coast and its affect on -- on the coastline and -- and structures in the coastline vicinity. So quite possibly we'll learn more.

Not wanting to get engaged in -- in any international incident, I'll just say my personal reflections rather than official CEC reflections on why the Japanese sited their nuclear plants where they sited them remains somewhat of a mystery to an awful lot of people. Knowing they had that significant subduction zone off of offshore Japan and why they put that plant where they did and why they did not anticipate what they saw is something history will have to shed more light on.

I feel reasonably confident California has done and California's utilities have done a better job. But I think the utilities in question know full well that I have been breathing down their back for years to push the need to get more data and knowledge.

With regard to the -- to the new nuke plants it's really because they're -- one has filed for and one has indicated intention to file for relicensing. And while the NRC says it takes all this into account, literally on a daily basis, they haven't shown me they've done a very good job. They have not shown California politicians. They have not shown our senators. And we had a hearing in Washington a few weeks ago which Senator Blakeslee and I testified as to the need for these types of studies, and I think they will be done.

I say all this just so the public knows and the record shows that the CEC and -- and staff and commissioners, and it just so happens this commissioner, have been deeply involved in questions about seismic safety of -- of the California infrastructure. And as Mr. Mason indicated, we as a human species learn more every day about things. And future rules and regulations reflect what we learn.

Some people probably might remember that the Diablo Canyon plant was virtually redesigned and then later even additional upfitted as a result of the discovery of the first offshore fault, the so called Hosgri Fault. The cost of the -- of the Diablo Canyon plant went from millions of dollars to billions of dollars as a result of some of that activity. And nonetheless, you know, our -- the studies

continue to go on and we impart that knowledge to all the rules and regulations that -- that we have here in California, and it could well effect the building codes.

I think we recognize the risk factor associated with a gas-fired plant located slightly more inland but -- but adjacent to -- to an estuary is -- the risk to the public is significantly less than -- than the risk we have with regard to a nuclear facility. And I'm sure Dr. Roe knows this, perhaps better than I. And Mr. Kramer indicated, you've got to keep the -- the fuel in the spent fuel pool cool. You've got to keep the reactor cool and the fuel in that reactor. And we've all witnessed the difficult of that in what has occurred in Japan. So we have a lot of activities underway in this state to try to make our utilities make that spent fuel safer.

In any event, the -- the issue has been fairly well discussed in the PMPD. And this committee was reasonably confident that this staff has gone to great pains to see that anything that can be known will be identified and applied to the -- the construction of this plant. But I think we're all -- we've all increased our concern as a result of what happened in Japan. And -- and it probably will affect our thinking with regard to the construction of the physical facilities and the coast and tsunamis and earthquakes in future years.

So there's a pretty substantial knowledge base at the CEC on the subjects, and hopefully it's been employed the maximum extent practical and feasible in the criteria laid out with regard to -- to the construction and operation of this -- of this particular plant.

And -- and Dr. Roe, I appreciate your concerns.

You made some very good points. And we are continuing to -to look at the issue. I think we all followed very closely
the -- the -- the effects of the tsunami and, you know, what
happens in a narrow passageway and -- and the basic physics
involved with the acceleration through a small channel of -of a moving fluid. So I think we will take a good look at
what could happen in -- in that lagoon.

So enough said. I just wanted the record to reflect that -- that the CEC has a pretty deep knowledge base in this area and a concern, and we've tried to do the best we can to address that.

Thank you, Mr. Kramer.

HEARING OFFICER KRAMER: Thank you, Commissioner Boyd.

That will then close the topic of the -- the lessons learned from the Japanese earthquake and tsunami.

So, Mr. Weaver, thank you for joining us.

MR. WEAVER: You're welcome. Thank you.

HEARING OFFICER KRAMER: And as well as -- I'm

having one of those moments --

COMMISSIONER BOYD: Mr. Mason.

HEARING OFFICER KRAMER: -- Mr. Mason. And we're now to the point where we can conduct our housekeeping for the hearing. And so let me put on the -- on the screen for everyone to look at the exhibit list. And I've highlighted in yellow things that were added for this hearing. So we can go through them one by one, or we can start with the -- the applicant's set of exhibits. Hold on.

The first one is Carlsbad Planning Commission

Resolution 6632. Any objection to receiving that? Seeing

none. I'm just going to fill this in as we go.

The next is Exhibit 199. That's the -- their One Hour Air Modeling Protocol for NO2, both an original and -- well, it looks like two revised versions. Any objection to that?

MR. MCKINSEY: On that -- on that item I -- we might want to come back to that only because I think it -- it may have also been submitted, at least we don't need duplicate versions of the modeling.

HEARING OFFICER KRAMER: Oh. Okay.

MR. MCKINSEY: Did Staff provide that, as well, or is that the only endpoint where it's an exhibit?

HEARING OFFICER KRAMER: Staff had their own, I believe.

1 MR. RATLIFF: Staff filed its own, but we did not 2 file yours. 3 MR. MCKINSEY: Okay. 4 MR. RATLIFF: You docketed, as I understand it, 5 you docketed yours a year ago, more than a year ago. 6 MR. MCKINSEY: Yes. 7 MR. RATLIFF: But it was never made an exhibit. 8 HEARING OFFICER KRAMER: Okay. So then it should 9 be an exhibit now then. Okay. Seeing no objection. 10 The -- the next one, 199A, though, does appear to 11 be a duplicate of 197 here. So we will not receive that 12 one; do you think that's correct, Mr. McKinsey? Okay. 13 MR. MCKINSEY: Yes. 14 HEARING OFFICER KRAMER: 199B is housing and --15 the City Housing and Redevelopment Commission Resolution 16 Number 420. Any objection to receiving that? Hearing none, 17 that's received. 18 Exhibit 199C as in Charlie is again a Housing and 19 Redevelopment Commission Resolution 477. Any objections? 20 Hearing none, that's received. 21 199D as in dog is the written testimony of Ronald 22 W. Rouse regarding the extraordinary public -- public

And then 199E is a declaration of Mr. Rouse in

purpose issue. It was undated. Any objection to receiving

that? Hearing none, that's received.

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support of Exhibit 199D. Oops, I didn't delete the rest of -- yes. There we go. Okay. I've corrected a typo, and I've gone to far. So I think the -- the date of that may be wrong. I think in one of these there was a typo and it was actually dated -- mistakenly dated, I think in 2010.

MR. MCKINSEY: Yeah. That's -- yes. That should be 2011.

HEARING OFFICER KRAMER: Okay. Well, if it says 2010 I guess I should 2010 on here. I'll check that later.

Anyways, any objection of receiving this into evidence? Hearing none, that's received.

And then 199F as in Frank is the condition regarding the shutdown of units four and five. That was circulated by the applicant yesterday. Any objection to receiving that? Hearing none, that is received into evidence. Okay.

And then --

MR. MCKINSEY: Hearing Office Kramer, I verified the date. 199E is indeed -- it says 2011 on it.

HEARING OFFICER KRAMER: It does say 2011? Okay. Thanks.

Okay. Now let me page down to the next set. From staff we have their Air Quality Impact Analysis Addendum 1 regarding NO2. That's Exhibit 226. Any objection to receiving that? Hearing none, that's received.

And Exhibit 227 is the fire protection testimony of Dr. Alvin Greenberg. Any objection to receiving that? That's received.

Then from, what is this, Terramar we have a series of exhibits. This list has all been circulated earlier. It's 377 through 389. Is there any objection to receiving any of these documents? Okay. Hearing none, those will all be received.

And then from the city we have -- I think, Mr. McKinsey, you -- you had objections to some of these; is that correct?

MR. MCKINSEY: Correct. And I -- as I understand the city is not going to submit for evidence 436, 441 and 442, which would be -- that's my numbers, so we should probably make sure they match your numbers. 436, that's correct. And then if you could scroll down to 441 and 442.

HEARING OFFICER KRAMER: Okay. So then with those three exceptions, is that correct, Mr. Thompson?

MR. THOMPSON: That is. I do have one housekeeping item before I would move these.

HEARING OFFICER KRAMER: Okay.

MR. THOMPSON: We neglected, I think, to have a sponsor for 440. And what I would like to do is ask Mr. Garuba a couple questions about that exhibit.

HEARING OFFICER KRAMER: Well, if the other

parties wave that requirement we could -- we could probably dispense with that -
MR. THOMPSON: Okay.

HEARING OFFICER KRAMER: -- if they stipulate to its entry.

Any -- Mr. McKinsey, is that fine?

MR. MCKINSEY: We have no issues with that. This is the after action report. The -- the issue with it is it just -- it isn't completely self-authenticating. Because on the -- on the pages you really can't tell what it is.

And -- and so -- and that's why we're trying to figure out what to call it.

HEARING OFFICER KRAMER: Right.

MR. MCKINSEY: And -- and so I think it is better if we just have somebody say, yeah, that's an accurate copy of the document or something.

 $\label{eq:hearing officer kramer: Okay. Go ahead then, Mr.} \\ Thompson.$ 

## DIRECT EXAMINATION BY CITY OF CARLSBAD

MR. THOMPSON: Mr. Garuba, are you familiar with what has been identified as Exhibit 440 and we're calling the Escondido After Action Report?

MR. GARUBA: Yes.

MR. THOMPSON: Is it a true and correct copy of the -- the report submitted by Escondido regarding the fire?

MR. GARUBA: To my knowledge, yes.

MR. THOMPSON: Do you know who in the city
received this report first?

MR. GARUBA: I believe it was Operations Fire Chief Chris Heiser.

MR. THOMPSON: And to the best of your knowledge it's true and correct?

MR. GARUBA: Yes.

MR. THOMPSON: Thank you.

HEARING OFFICER KRAMER: Okay. So then regarding Exhibits 44 -- oh, I'm sorry, 43 --

MR. MCKINSEY: 440 and 441.

HEARING OFFICER KRAMER: Okay. So it's --

MR. MCKINSEY: Excuse me, 441 and 442.

HEARING OFFICER KRAMER: Yeah. So 435 to 443, with the exception of 436, 441 and 442, will be admitted, unless I hear an objection, and I hear none. So that is what we will do.

And then from Power of Vision we have Exhibits 744 which is the AB 1632 report, and 745 which is a page from the National Propane Gas Association website. Any objection to the acceptance of those into evidence? Hearing none, those will be accepted.

Exhibit 746 was a duplicate of 379, which was just admitted. So it will not be admitted.

And 747 was a duplicate of 378 and similarly will not be admitted.

And Mr. Simpson had nothing to add. So I -- that's the complete exhibit list.

Now I can't think of any other housekeeping items, except if the parties want to make any particular oral comment about the PMPD at this point in time we're willing to accept those. Otherwise, we'll -- we'll take your written.

MR. THOMPSON: I think that the -- I think Mr. Ball had mentioned the motion for extension of time. I'm not sure that you ruled on that.

HEARING OFFICER KRAMER: Right. Okay. We'll get to that in a minute.

Let me first check and see if there are any members of the public here who want to make a public comment. There appear to be none.

MS. FREDINBURG: Yes. Hello?

HEARING OFFICER KRAMER: Oh. Okay. You're on the telephone?

MS. FREDINBURG: Yes.

HEARING OFFICER KRAMER: Go ahead and give us your name and spell -- spell it for us so the court reporter will spell it correctly in the transcript.

MS. FREDINBURG: Certainly. And I was at the

hearing last night, as well, but I saw something in the paper today that concerned me. My name is Catherine Fredinburg, C-a-t-h-e-r-i-n-e, Fredinburg,

F-r-e-d-i-n-b-u-r-q. I'm a Carlsbad resident -- resident,

and I live on the Capri Tract across the lagoon from the plant.

I did notice on the front page of the San Diego Union Tribune Local section today the headline, "Bill Backs Expansion of I-5 to 12 Lanes in North County." The proposal calls -- now endorses a proposal to widen the freeway to 12 lanes. It revises Senate Bill 468 carried by Senator Christine Kehoe, Democrat, San Diego.

So one of the concerns I think that was expressed was that the expansion of the I-5 in the proposal has been treated as a hypothetical and therefore not dealt with in the level of detail that it should be. I'm hoping that this issue that has come out here today in the paper will cause some further detail to be put into the plan, how to deal with the I-5 expansion. Clearly it's -- it's no longer just a hypothetical.

And that would be the comment.

HEARING OFFICER KRAMER: Thank you.

MS. FREDINBURG: Thank you.

HEARING OFFICER KRAMER: Anyone else on the telephone want to make a public comment? Okay. We'll close

the public comment again. Okay.

There were -- besides the city's motion there were various motions made during the -- the time between the -- the close of the hearings February of last year and -- and these hearings. Many of those were in effect wielded upon by the committee's inclusion of some of the topics in the topics to be considered yesterday and today.

To the extent that -- that a motion was made previously to add to the record, and that includes a motion from the applicant in February of 2010, motions from Terramar, from the Center for Biological Diversity, from Power of Vision, although I believe most of their motion was granted in effect by the -- the discussions we had, and the City of Carlsbad who I believe was the party to raise the fire safety lessons learned, but to the extent those motions were not in effect granted by the -- the way we set up the hearings and the issues we put on the table, they are denied, just to make things clear.

As to the city's motion to extend the -- the time, both for public comment and for -- for the scheduling of the business meeting to consider adoption of the PMPD, we're going to go off the record for a minute and deliberate, and we'll be back shortly.

(Off the Record From 10:26 a.m., Until 10:27 a.m.)

HEARING OFFICER KRAMER: We're back on the record.

The committee will continue the current deadline for public comments which is June 8th. And to be clear that received at the commission either by email to our dockets unit or received physically in the -- in the U.S. Mail or by personally delivery by 5:00 p.m. on June 8th. So postmarks do not count. And so we will maintain that deadline and continue the scheduled business meeting on June 15th, you know, subject to later review if, you know, if it becomes necessary to have more time, for the committee to have more time to perform the work it needs to do in preparation for that meeting. But for now we're going to maintain the schedule as it was published.

And I think that covers all the pending motions.

So is there any other business we need to conduct today?

MR. RATLIFF: Mr. Kramer, the staff has redrafted one of the conditions, I think it was Worker Safety 11 to meet the city's -- the city fire department's request that -- that the city's water system would be the primary system.

But -- and -- and we also have redrafted, or actually we -- we are prepared to respond to clarify any uncertainty about Worker Safety 8, which I think the committee was -- was querying us about.

HEARING OFFICER KRAMER: Okay. That's -MR. RATLIFF: We -- we can do that now, but we can

also do that in our response to comments, in our written response to comments and --

HEARING OFFICER KRAMER: Well, let's take care of that now. It will just take a minute. So you have a new exhibit -- or a new condition.

6 MR. RATLIFF: It has not been distributed, unfortunately.

HEARING OFFICER KRAMER: Is it available to be distributed or --

MR. RATLIFF: Yes.

MR. MONASMITH: Well --

MR. RATLIFF: Can -- can we do that? Do we have copies? Okay.

14 (Pause)

HEARING OFFICER KRAMER: Okay. So this new Worker Safety 11 will be Exhibit 228. Does anybody object to its entry into evidence?

MR. MCKINSEY: Applicant has no objections.

HEARING OFFICER KRAMER: Okay. Hearing none, then it will be accepted into evidence, and I'll finish the description here. Do any of the parties have comments about this?

MR. THOMPSON: Preliminarily we think it does the job. We would like to run it by the fire department officials who are not here. But we think -- we think it

1 does it.

HEARING OFFICER KRAMER: Okay. So you can let us know in your comments then.

MR. THOMPSON: Yes.

MR. RATLIFF: And the --

HEARING OFFICER KRAMER: Okay.

MR. RATLIFF: The other issue had to do with Soil and Water 8. And I think the committee expressed some uncertainty as to what staff agreed was acceptable in terms of having personnel on the site during plant operations.

HEARING OFFICER KRAMER: Worker Safety 8 do you mean or --

MR. RATLIFF: Yes. Is it Worker Safety 8?

MR. MONASMITH: Yeah, Worker Safety 8.

MR. RATLIFF: I'm sorry. Worker Safety 8.

HEARING OFFICER KRAMER: Yeah. The -- the concern was that in the transcript of the hearing on this topic Dr. Greenberg orally agreed with the changes that were proposed by the applicant. And then -- and then down the road in one of the -- one of the staff briefs you said you were opposed to the change. And so I just wanted to -- to get clear about what the staff's position was.

And then also if the applicant can tell me, did we -- did we accurately capture the change you were looking for in the -- the version that's in the PMPD?

MR. MCKINSEY: This is Worker Safety 8, correct, the two worker?

HEARING OFFICER KRAMER: Right. It's about where the workers have to be when the startup button is pushed.

MR. MCKINSEY: Yeah. We're not -- we have no issues with that condition as it's drafted in the PMPD.

HEARING OFFICER KRAMER: Okay.

DR. GREENBERG: And, Hearing Officer Kramer, this is Alvin Greenberg. I also concur with the wording in Worker Safety 8 as written in the PMPD. It reflects an agreement that the bowl, the actual site of the power plant could be unmanned until startup. When startup commences workers shall proceed directly to the bowl to be there while the power plant is in operation.

HEARING OFFICER KRAMER: Okay. Great. Just as a heads-up, we've been working on trying to make the formatting of the -- the page numbering a little more friendly. And we have a new concept that we may, if we have time, spring in this -- in the -- well, actually it probably won't be until the final decision is produced. But it will make it a little easier for -- for you to figure out where you are in the decision between one section relative to another. Right now the -- you have to know that, for instance, public safety is right ahead of worker safety. And we're going to come up with a numbering scheme that is

more like the way the staff assessments are numbered, so don't be surprised by that.

Was there any other business to conduct then?

MR. MCKINSEY: Did we assign an exhibit number to the Worker Safety 11?

HEARING OFFICER KRAMER: Yeah. It's 228.

MR. MCKINSEY: Oh. Thank you. Thank you.

HEARING OFFICER KRAMER: It's just my computer keeps giving me a message.

So any other business to conduct? Nobody's indicating that we have -- Mr. McKinsey?

MR. MCKINSEY: Do you want party comments or -HEARING OFFICER KRAMER: Oh, did you have some?
Go ahead.

MR. MCKINSEY: Yes. The president of NRG West, Steve Hoffmann, is here and he wanted to make a couple of comments.

HEARING OFFICER KRAMER: Please, go ahead. And spell your name for the reporter.

MR. HOFFMANN: H-o-f-f-m-a-n-n. I just wanted to comment and thank the commission and particularly the staff for -- for their diligence. I know that this is -- it takes a lot of work that not very many people can fully appreciate because of its complexity. And especially the proceeding went through a lot of furloughs and some other scheduling

problems that taxed the commission and their staff and I think they are to be commended.

And I also wanted to thank the constructive involvement of the community and all the intervenors because these things can become much more difficult if the -- if the parties aren't interested in a constructive outcome. And we commit to working with -- with all the parties to resolve some of these open issues. But thank you.

HEARING OFFICER KRAMER: Thank you. So with that, Commissioner Boyd, did you have some closing remarks?

COMMISSIONER BOYD: Yes, thank you. Well, I, too, will thank all the parties for their active participation in this issue. This has been a long drawn-out hearing process that possibly could have been concluded much earlier, were there not other high-level priorities placed in front of the staff of the CEC with regard to federal economic stimulus money for certain type projects proposed throughout the state.

And also were it not the fact that, as just indicated, our agency, like all state agencies, has been severely impacted in terms of its resources and its flexibility by the state of the California economy. And the -- the staff has done Herculean work the last year plus on all the siting cases. I was very proud of them at the end of last year when we tallied up the number of cases in

megawatts that came out of the commission. I was quite pleased and surprised.

So they have really worked themselves to the bone to try to -- to try to keep up with projects, and got this one back on track. And while some people feel the timeline is awful short now, in reality it's -- it's been extraordinarily long. And we're just trying to -- to conclude it rapidly. After all, the law says we -- we have a year to do these kinds of things. And it's going to be a very rare day that it can be done within a year, obviously.

In any event, I appreciate the ongoing negotiations that have been stimulated by the discussions of the last two days, if not the discussions over the past many, many months. Maybe with or without any encouragement from this committee hopefully we've contributed our sense of concern and urgency to that issue. And I do look forward to resolving this issue.

I did an unusual thing last night and did a little bit of Energy 101 for the audience. I really for citizen audiences that get quite concerned about our communities we don't do it enough in explaining the real world.

And I left out Hearing Procedures 101 from my lecture last night which I regret, because I don't think the citizens in general understand the siting process, understand that this is a very judicial process, understand

that ex parte communication laws are very strict, that we can't even talk to our own staff except in this public forum about cases. And lord knows what citizens think kind of cozy relationships exist between commissioners and their staffs. And I think many people are usually surprised and shocked to learn that — that we can't carry on communications with intervenors or our staff other than in this forum, that it's very judicial. And decisions are predicated on the record established by these hearings, not our visceral or emotional feelings about some of the issues that are brought before us.

So at any event I look forward to concluding this case in the not too distant future if -- if that is feasible and possible. And I look forward to hopefully the citizens in this area who have been very involved -- and believe me, believe it or not we appreciate that. It's disappointing in some parts of the state to speak over a period of years to very tiny little audiences of folks showing the lack of interest, except later on maybe in the press in -- in the process and procedures. So I thank the citizens of this area for their -- for their interest and for their courtesy.

And while there were some obviously strong opinions expressed last night we commissioners understand that and do a halfway decent job most of the time of absorbing it. It's been almost -- well, I'm in my tenth

year as a commissioner and I've heard an awful lot of this and I've learned a lot, and I appreciate peoples' point of view. It's also a few weeks short of my 50th year as a public servant in California, and it's been an interesting experience.

So in any event, thank you all. And I look forward to -- to continuing all of this -- all of our work on a better California. Thank you.

And I guess, Mr. Kramer, you can adjourn the hearings if there's no --

HEARING OFFICER KRAMER: Okay. So we're adjourned. Thank you all for your participation.

(Thereupon the California Energy Commission,

Carlsbad Energy Center Project Notice of Availability of the

Presiding Member's Proposed Decision and Notice of Committee

Conference and Evidentiary Hearing and Notice of Full

Commission Hearing adjourned at 10:42 a.m.)

## CERTIFICATE OF REPORTER

I, MARTHA L. NELSON, an Electronic Reporter, do hereby certify that I am a disinterested person herein; that I recorded the foregoing California Energy Commission Committee Conference and Evidentiary Hearing; that I thereafter transcribed it into typewriting.

I further certify that I am not of counsel or attorney for any of the parties to said conference and evidentiary hearing, or in any way interested in outcome of said conference.

IN WITNESS WHEREOF, I have hereunto set my hand this 23rd day of May, 2011.

MARTHA L. NELSON - CERT 00367